SEQUENCE LISTING

<110> University of Warwick

<120> Antibody Secretion

<130> P708122GB

<140> GB0226787.7
<141> 2002-11-18

<160> 69

<170> PatentIn version 3.2

<210> 1
<211> 6
<212> PRT
<213> Artificial

<220>
<223> Modified targeting signal in the final antibody heavy chain

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Asn, His or Leu

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Val or Tyr

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Ser or Asn

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> An aliphatic amino acid, especially Val or Leu

<220>
<221> misc_feature
<222> (6)..(6)
<223> Xaa can be any naturally occurring amino acid

<400> 1

Xaa Xaa Xaa Val Ser Xaa
1 5

<210> 2
<211> 6
<212> PRT
<213> Artificial

<220>
<223> Modified targeting signal in the final antibody heavy chain

<400> 2

Asn Val Ser Val Ser Val
1 5

<210> 3
<211> 3
<212> PRT
<213> Artificial

<220>
<223> Modified targeting signal in the final antibody heavy chain

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> m copies of, independently, any amino acid with the proviso that it is not selected from Ile, Leu or forms the consecutive sequence described in SEQ ID:4. m is an integer of at least 2. Preferably, m is between 4 and 20, especially 5 to 10.

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> n copies of any amino acid, the presence of each amino acid is independent of the other(s). n is an integer of 0 to 5. Preferably n= 0 or 1, especially 1. This amino acid is most preferably Tyr or Ala, especially Ala. Preferably

<400> 3

Xaa Cys Xaa
1

<210> 4
<211> 6
<212> PRT
<213> Artificial

<220>
<223> Definition of X at position 1 in SEQ ID: 3

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Asn, His or Leu

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Val or Tyr

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Ser or Asn

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Any aliphatic amino acid

<220>

<221> misc_feature
<222> (6)..(6)
<223> Xaa can be any naturally occurring amino acid

<400> 4

Xaa Xaa Xaa Val Ser Xaa
1 5

<210> 5
<211> 18
<212> PRT
<213> Artificial

<220>
<223> Modified targeting signal in the final antibody heavy chain

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Asn, His or Leu. Preferably Leu

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Val or Tyr, preferably Val

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Ser or Asn

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> An aliphatic amino acid, preferably Val or Leu

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> An aliphatic amino acid, preferably Ile, Val or Leu

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> Met, Val or Leu, preferably Met

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Ser or Ala

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Asp or Glu

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Any amino acid, preferably Gly, Val, Ala or Thr

<220>

<221> MISC_FEATURE
<222> (14)..(14)
<223> Asp, Glu, Gly, or Ala, preferably Asp

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> Gly or Ser, preferably Gly

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Ile, Thr, Val, Glx or Ala, preferably Ile or Thr

<220>
<221> MISC_FEATURE
<222> (18)..(18)
<223> May or may not be present and where present is Ala or Tyr. Most preferably, where this amino acid present it is Ala.

<400> 5

Pro Thr Xaa Xaa Xaa Val Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Cys Xaa

<210> 6
<211> 6
<212> PRT
<213> Artificial

<220>
<223> Modified targeting signal in the final antibody heavy chain

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Asn, His or Leu

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Val or Tyr

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Ser or Asn

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Aliphatic amino acid

<400> 6

Xaa Xaa Xaa Val Ser Xaa
1 5

<210> 7
<211> 28
<212> PRT
<213> Artificial

<220>
<223> Modified targeting signal in the final antibody heavy chain

<400> 7

Ser Cys Met Val Gly His Glu Ala Leu Pro Met Asn Phe Thr Gln Lys
1 5 10 15

Thr Ile Asp Arg Leu Ser Gly Lys Pro Ala Cys Tyr
20 25

<210> 8
<211> 30
<212> PRT
<213> Artificial

<220>
<223> Modified targeting signal in the final antibody heavy chain

<400> 8

Ser Cys Met Val Gly His Glu Ala Leu Pro Met Asn Phe Thr Gln Lys
1 5 10 15

Thr Ile Asp Arg Leu Ser Gly Lys Pro Ala Ala Ala Cys Tyr
20 25 30

<210> 9
<211> 38
<212> PRT
<213> Artificial

<220>
<223> Modified targeting signal in the final antibody heavy chain

<400> 9

Ser Cys Met Val Gly His Glu Ala Leu Pro Met Asn Phe Thr Gln Lys
1 5 10 15

Thr Ile Asp Arg Leu Ser Gly Lys Pro His Ala Ser Thr Pro Glu Pro
20 25 30

Asp Pro Val Ala Cys Tyr
35

<210> 10
<211> 27
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 10
ccatcgatgg aatggacctg ggttttt 27

<210> 11
<211> 27
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 11
ccctctagac tagtagcata ggccatc 27

<210> 12
<211> 31
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 12
actgtagaca attccgccac ctcagcctac a 31

<210> 13
<211> 31
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 13
tgtaggctga ggtggcggaa ttgtctacag t 31

<210> 14
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 14
gagcagctca acagcgtttt ccgctcagtc ag 32

<210> 15
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 15
ctgactgagc ggaaaacgct gttgagctgc tc 32

<210> 16
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 16
ttgcccatga acttcgtcca gaagaccatc ga 32

<210> 17
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 17
tcgatggtct tctggacgaa gttcatgggc aa 32

<210> 18
<211> 33
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 18
aaacccacca atgtcgctgt gtctgtgatc atg 33

<210> 19
<211> 33
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 19
catgatcaca gacacagcga cattggtggg ttt 33

<210> 20
<211> 30
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 20
ccctctagac tatttacccg acagacggtc 30

<210> 21
<211> 32
<212> DNA
<213> Artificial

<220>
<223> Synthetic oligonucleotide

<400> 21
gagcagctca acagcgtttt ccgctcagtc ag 32

<210> 22
<211> 8
<212> PRT
<213> Artificial

<220>
<223> Tailpiece of artificial C-terminus of heavy chain

<400> 22

Pro Ala Ala Ala Ala Ala Cys Tyr
1 5

<210> 23
<211> 40
<212> PRT
<213> Mus musculus

<400> 23

Cys Met Val Gly His Glu Ala Leu Pro Met Asn Phe Thr Gln Thr Ile
1 5 10 15

Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile Met
20 25 30

Ser Glu Gly Asp Gly Ile Cys Tyr
35 40

<210> 24
<211> 23
<212> PRT
<213> Mus musculus

<400> 24

Cys Ser Val Leu His Glu Gly Leu His Asn His His Thr Glu Lys Ser
1 5 10 15

Leu Ser His Ser Pro Gly Lys
20

<210> 25
<211> 25
<212> PRT
<213> ALC_MOUSE

<400> 25

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 26
<211> 25
<212> PRT
<213> Q9DCD9

<400> 26

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 27
<211> 25
<212> PRT
<213> Q91WP5

<400> 27

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 28
<211> 25
<212> PRT
<213> Q99M22

<400> 28

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 29
<211> 25
<212> PRT
<213> Q91XE1

<400> 29

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 30
<211> 25
<212> PRT
<213> AAH29188

<400> 30

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 31
<211> 25
<212> PRT
<213> Q91WT1

<400> 31

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 32
<211> 25
<212> PRT
<213> Q91WT3

<400> 32

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 33
<211> 25
<212> PRT
<213> Q8VCV5

<400> 33

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 34
<211> 25
<212> PRT
<213> Q91X92

<400> 34

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 35
<211> 25
<212> PRT
<213> AAH28249

<400> 35

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 36
<211> 25
<212> PRT
<213> Q8VEA0

<400> 36

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 37
<211> 25
<212> PRT
<213> Q99LA6

<400> 37

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 38
<211> 25
<212> PRT
<213> Q91ZO7

<400> 38

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 39
<211> 25
<212> PRT
<213> Q99KA4

<400> 39

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 40
<211> 25
<212> PRT
<213> Q91WR1

<400> 40

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 41
<211> 25
<212> PRT
<213> AAH31703

<400> 41

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 42
<211> 25
<212> PRT
<213> Q8VCX4

<400> 42

Ile Asp Arg Leu Ser Gly Lys Pro Thr Asn Val Ser Val Ser Val Ile
1 5 10 15

Met Ser Glu Gly Asp Gly Ile Cys Tyr
20 25

<210> 43
<211> 25
<212> PRT
<213> ALC2_HUMAN

<400> 43

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 44
<211> 25
<212> PRT
<213> ALC1_GORGO

<400> 44

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 45
<211> 25
<212> PRT
<213> ALC1_HUMAN

<400> 45

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 46
<211> 25
<212> PRT
<213> Q9UP60

<400> 46

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 47
<211> 25
<212> PRT
<213> Q9NPP6

<400> 47

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 48
<211> 25
<212> PRT
<213> BAC11114

<400> 48

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 49
<211> 25
<212> PRT
<213> Q96K68

<400> 49

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 50
<211> 25
<212> PRT
<213> Q96KX8

<400> 50

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 51
<211> 25
<212> PRT
<213> Q96DK0

<400> 51

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 52
<211> 25
<212> PRT
<213> Q8WY24

<400> 52

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 53
<211> 25
<212> PRT
<213> AAH32249

<400> 53

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 54
<211> 25
<212> PRT
<213> Q9BRV0

<400> 54

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Met Ala Glu Val Asp Gly Thr Cys Tyr
20 25

<210> 55
<211> 25
<212> PRT
<213> ALC_RABIT

<400> 55

Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val
1 5 10 15

Val Ala Asp Val Glu Ala Val Cys Tyr
20 25

<210> 56
<211> 25
<212> PRT
<213> MUS_MESAU

<400> 56

Val Asp Arg Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Ile
1 5 10 15

Met Ser Asp Ala Gly Gly Thr Cys Tyr
20 25

<210> 57
<211> 25
<212> PRT
<213> MUC_MOUSE

<400> 57

Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Ile
1 5 10 15

Met Ser Asp Thr Gly Gly Thr Cys Tyr
20 25

<210> 58
<211> 25
<212> PRT
<213> Q9BSZ1

<400> 58

Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val
1 5 10 15

Met Ser Asp Thr Ala Gly Thr Cys Tyr
20 25

<210> 59
<211> 25
<212> PRT
<213> MUCB_HUMAN

<400> 59

Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val
1 5 10 15

Met Ser Asp Thr Ala Gly Thr Cys Tyr
20 25

<210> 60
<211> 25
<212> PRT
<213> MUC_HUMAN

<400> 60

Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val
1 5 10 15

Met Ser Asp Thr Ala Gly Thr Cys Tyr
20 25

<210> 61
<211> 25
<212> PRT
<213> Q9BQB8

<400> 61

Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val
1 5 10 15

Met Ser Asp Thr Ala Gly Thr Cys Tyr
20 25

<210> 62
<211> 25
<212> PRT
<213> Q9BU10

<400> 62

Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val
1 5 10 15

Met Ser Asp Thr Ala Gly Thr Cys Tyr
20 25

<210> 63
<211> 25
<212> PRT
<213> Q96BB9

<400> 63

Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val
1 5 10 15

Met Ser Asp Thr Ala Gly Thr Cys Tyr
20 25

<210> 64
<211> 25
<212> PRT
<213> MUC_CANFA

<400> 64

Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val
1 5 10 15

Leu Ser Asp Thr Ala Gly Thr Glx Tyr
20 25

<210> 65
<211> 25
<212> PRT
<213> MUC_SUNMU

<400> 65

Val Asp Lys Thr Ser Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val
1 5 10 15

Leu Ser Asp Thr Ala Ser Thr Cys Tyr
20 25

<210> 66
<211> 25
<212> PRT
<213> MUC_RABIT

<400> 66

Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Ile
1 5 10 15

Met Ser Asp Thr Ala Ser Thr Cys Tyr
20 25

<210> 67
<211> 25
<212> PRT
<213> MUC_CHICK

<400> 67

Val Asp Arg Ala Ser Gly Lys Ala Ser Ala Val Asn Val Ser Leu Val
1 5 10 15

Leu Ala Asp Ser Ala Ala Ala Cys Tyr
20 25

<210> 68
<211> 22
<212> PRT
<213> Q8YOT9

<400> 68

Arg Ile Gly Gly Pro Pro Thr Gly Ile Thr Ser Asp Val Tyr Leu Ser
1 5 10 15

Val Tyr Glu Gly Val Cys
20

<210> 69
<211> 32
<212> PRT
<213> Artificial

<220>
<223> Modified targeting signal in the final antibody heavy chain

<400> 69

Ser Cys Met Val Gly His Glu Ala Leu Pro Met Asn Phe Thr Gln Lys
1 5 10 15

Thr Ile Asp Arg Leu Ser Gly Lys Pro Ala Ala Ala Ala Ala Cys Tyr
20 25 30